

Amendments to the Claims:

Please amend the claims as shown below. This Listing of Claims will replace prior versions, and listings, of claims in the application.

Listing of Claims:

1-53 (canceled)

54. (currently amended) An image processing apparatus comprising:

inputting means for inputting area-assignment information that defines latent-image area and background area, area and additional information ~~which is different from any of the latent-image area, the background area and the area-assignment information;~~

determination means for determining a plurality of positions in the background area which is defined by the area-assignment information and a plurality of positions in the latent-image area which is defined by the area-assignment information, ~~wherein at least either positions of the plurality of positions in the background area and the plurality of positions in the latent-image area are determined based on the additional information;~~ and

generating means for generating patterned image data by arranging first dots of a first dot size at the determined positions in the background area and arranging second dots of a second dot size that is a smaller dot size than the first dot size at the determined positions in the latent-image area, the first dots being easily reproducible when copied and the second dots not being easily reproducible when copied.

wherein, it can be determined whether an image on a printed material is an original because the additional information which is different from any of the latent-image area, the background area and the area-assignment information can be extracted by determining directions to which positions of the arranged dots are away from the predetermined positions from the original image based on the positions of the arranged second dots and predetermined positions in the latent-image area, and the additional information cannot be extracted from a copy.

55. (currently amended) An image processing apparatus according to claim 54, wherein the additional information can be extracted based on the difference between the positions of the arranged second dots and predetermined positions in the vertical axis and the difference between the positions of the arranged second dots and the predetermined positions in the horizontal axis.

56. (currently amended) An image processing apparatus according to claim 55, wherein the additional information can be extracted based on whether the result of multiplication of the difference between the positions of the arranged second dots and predetermined positions in the vertical axis and the difference between the positions of the arranged second dots and the predetermined positions in the horizontal axis is negative or positive.

57-62. (canceled)

63. (currently amended) An image processing method comprising:
inputting area-assignment information that defines latent-image area and background area, area and additional information ~~which is different from any of the latent-image area, the background area and the area-assignment information;~~

determining a plurality of positions in the background area which is defined by the area-assignment information and a plurality of positions in the latent-image area which is defined by the area-assignment information, ~~wherein at least either positions of the plurality of positions in the background area and the plurality of positions in the latent-image area are determined based on the additional information;~~ and

generating patterned image data by arranging first dots of a first dot size at the determined positions in the background area and arranging second dots of a second dot size that is a smaller dot size than the first dot size at the determined positions in the latent-image area, the first dots being easily reproducible when copied and the second dots not being easily reproducible when copied.

wherein it can be determined whether an image on a printed material is an original because the additional information which is different from any of the latent-

~~image, background area and the area assignment information can be extracted by determining directions to which positions of the arranged dots are away from the predetermined positions from the original image based on the positions of the arranged second dots and predetermined positions in the latent-image area, and the additional information cannot be extracted from a copy.~~

64. (currently amended) An image processing method according to claim 63, wherein the additional information can be extracted based on the difference between the positions of the arranged second dots and predetermined positions in the vertical axis and the difference between the positions of the arranged dots and the predetermined positions in the horizontal axis.

65. (currently amended) An image processing method according to claim 64, wherein the additional information can be extracted based on whether the result of multiplication of the difference between the positions of the arranged second dots and predetermined positions in the vertical axis and the difference between the positions of the arranged second dots and the predetermined positions in the horizontal axis is negative or positive.

66. (previously presented) A computer-readable storage medium capable of storing computer-executable instructions for performing an image processing method according to claim 63.

67. (currently amended) An image processing apparatus according to claim 54, wherein the length between each of positions of the arranged second dots and each of the predetermined positions is less than half of the length between two of the predetermined positions.

68. (currently amended) An image processing apparatus according to claim 67, wherein the positions of the arranged second dots correspond to the predetermined positions ~~one to one~~ on a one-to-one basis.

69. (currently amended) An image processing method according to claim 63, wherein the length between each of positions of the arranged second dots and each of the predetermined positions is less than half of the length between two of the predetermined positions.

70. (currently amended) An image processing method according to claim 69, wherein the positions of the arranged second dots correspond to the predetermined positions ~~one to one~~ on a one-to-one basis.